TECHNICAL REPORT

Intertek

CGEE HVAC Systems

Project name					
Submitted by			Date		
Customer			Quantity	1	
OVERVIEW					
System Type	**Water-Cooled Self-Contained Uni**		Refrigerant	**R410A**	
Series	**WCPSC**		Power supply	**460V/3/60HZ**	
Unit nomenclature	**WCPSC115VCOAR**				
Altitude	**0**	**ft**	Approval	**ETL**	
FILTER					
Type	**2" MERV8, 4" MERV14**				
Size (Qty)	**20x20x2(16), 20x25x2(8)**				
DX COOLING COIL					
Type	**Ø1/2**		Number of coil	**1**	
Rows	**6**		Face area	**69.97**	**ft²**
Fins per inch	**12**		Face velocity	**592**	**ft/min**
Refrigerant	**R410A**		Entering air (DB)	**78**	**°F**
Capacity (Total)	**1700611**	**Btu/h**	Entering air (WB)	**68**	**°F**
Capacity (Sensible)	**1033538**	**Btu/h**	Leaving air (DB)	**54.9**	**°F**
Air pressure drop	**1.5**	**inH2O**	Leaving air (WB)	**54.3**	**°F**
HOT GAS REHEAT COIL					
Type	**Ø 3/8**		Number of coil	**1**	
Rows	**2**		Face area	**66.5**	**ft²**
Fins per inch	**12**		Face velocity	**622**	**ft/min**
Refrigerant	**R410A**		Entering air (DB)	**54.9**	**°F**
Capacity (Total)	**1003567**	**Btu/h**	Leaving air (DB)	**76.6**	**°F**
Air pressure drop	**0.3**	**inH2O**			
COMPRESSOR (OR EQUIVALENT MODELS)					
Compressor	**<VZH117AG+SH161> TDM (100%), SH161 TDM (2), SH140 TDM (1)**				
Type	**Scroll, Variable Speed**		Quantity	**8**	
Total LRA	**-, 1x158, 4x158, 2x147**	**A**	Total Power	**70.6**	**kW**
			Total Amps	**115.8**	**A**
FAN EC (EVAPORATOR)					
Type	**EC Fan**		Model	**K3G500**	
Air Flow	**41396**	**CFM**	Fan Speed	**2250**	**RPM**
External Static Pressure	**0.5**	**inH2O**	Absorbed Power	**25.5**	**kW**
Total Static Pressure	**3.2**	**inH2O**	Motor Horsepower	**n/a**	**HP**
Quantity	**5**		FLA	**39.3**	**A**
			Locked rotor current (LRA)	**n/a**	**A**
FAN (RETURN)					
Type	**Direct Driven**		Model	**BNB-Q710/DIIM (II) (2)**	
Air Flow	**35000**	**CFM**	Fan Speed	**1445**	**RPM**
External Static Pressure	**0**	**inH2O**	Absorbed Power	**7.99**	**kW**
Total Static Pressure	**1**	**inH2O**	Motor Horsepower / Poles Nr.	**15 / 4**	**HP**
Quantity	**5**		FLA	**86.5**	**A**
			Locked rotor current (LRA)	**580**	**A**
CONDENSER (WATER COOLED)					
Type	**8"D x (40+40)"L x 42H (1), 8"D x (40+40)"L x 48H (3)**		Fluid	**Water**	
			Entering fluid temp	**60**	**°F**
			Leaving fluid temp	**70**	**°F**
Quantity	**1**		Flow Rate	**389**	**Gal/mi**
			Fluid pressure drops	**2.792**	**psi**
ELECTRICAL SUMMARY					
Unit FLA	**241.6**	**A**	MCA	**251.4**	**A**
Total Power Input	**96.11**	**kW**	MFS	**300**	**A**
EER	**17.7**		IEER	**21.3**	
NOTES					
Manufacturer reserves the right to change specifications without prior notice.					
IEER (estimated as per AHRI 340/360 Standard Conditions)					